

Asynchronous motors

Main spindle motors for SIMODRIVE 611

1PM4/1PM6 standard type motors
SH 100/SH 132

Selection and Ordering Data

Shaft height	Rated speed		Con- tinu- ous speed, max.	Speed, max. 1)	Rated power for star $n_{ratedY} = 1\,500\text{ rpm}$		Rated power for delta $n_{rated\Delta} = 4\,000\text{ rpm}$		1PM4 asynchronous motor with hollow shaft Standard type	1PM6 asynchronous motor with hollow shaft Standard type
SH	star	delta			P_{rated}		P_{rated}		Order No.	Order No.
	rpm	rpm	$n_{S1cont.}$ rpm	n_{max} rpm	S1 kW (HP)	S6-40 % kW (HP)	S1 kW (HP)	S6-40 % kW (HP)		

									Oil cooling ²⁾	Forced ventilation
100	1 500	4 000	12 000	12 000	3.7 (5)	5.25 (7.04)	3.7 (5)	6 (8)	1PM4101 - 2LF86 - 1 ■ S1	1PM6101 - 2LF8 ■ - 1 ■ ■ 1
	1 500	4 000	18 000	18 000	3.7 (5)	5.25 (7.04)	3.7 (5)	6 (8)	1PM4101 - 2LF86 - 1 ■ S1 ³⁾	1PM6101 - 2LF8 ■ - 1 ■ ■ 1 ³⁾
	1 500	4 000	12 000	12 000	7.5 (10.1)	11 (15)	7.5 (10.1)	13 (17)	1PM4105 - 2LF86 - 1 ■ S1	1PM6105 - 2LF8 ■ - 1 ■ ■ 1
	1 500	4 000	18 000	18 000	7.5 (10.1)	11 (15)	7.5 (10.1)	13 (17)	1PM4105 - 2LF86 - 1 ■ S1 ³⁾	1PM6105 - 2LF8 ■ - 1 ■ ■ 1 ³⁾
132	1 500	4 000	10 000	10 500	11 (15)	16.5 (22.1)	11 (15)	19.5 (26.2)	1PM4133 - 2LF86 - 1 ■ S1	1PM6133 - 2LF8 ■ - 1 ■ ■ 1
	1 500	4 000	15 000	15 000	11 (15)	16.5 (22.1)	11 (15)	19.5 (26.2)	1PM4133 - 2LF86 - 1 ■ S1 ³⁾	1PM6133 - 2LF8 ■ - 1 ■ ■ 1 ³⁾
	1 500	4 000	10 000	10 500	18.5 (24.8)	28 (38)	18.5 (24.8)	32 (43)	1PM4137 - 2LF86 - 1 ■ S1	1PM6137 - 2LF8 ■ - 1 ■ ■ 1
	1 500	4 000	12 000	12 000	18.5 (24.8)	28 (38)	18.5 (24.8)	32 (43)	1PM4137 - 2LF86 - 1 ■ S1 ³⁾	1PM6137 - 2LF8 ■ - 1 ■ ■ 1 ³⁾
	1 500	4 000	10 000	10 500	22 (30)	33 (44)	22 (30)	39 (52)	–	1PM6138 - 2LF8 ■ - 1 ■ ■ 1
	1 500	4 000	11 000	11 000	22 (30)	33 (44)	22 (30)	39 (52)	–	1PM6138 - 2LF8 ■ - 1 ■ ■ 1 ³⁾
	1 500	4 000	10 000	10 500	22 (30)	33 (44)	22 (30)	39 (52)	–	–
	1 500	4 000	11 000	11 000	22 (30)	33 (44)	22 (30)	39 (52)	–	–

									Water cooling ⁴⁾			
100	1 500		12 000	12 000	5 (7)	6.5 (8.7)	–	–	1PM4101 - 2LW26 - 1 ■ S1			
	1 500		18 000	18 000	5 (7)	6.5 (8.7)	–	–	1PM4101 - 2LW26 - 1 ■ S1 ³⁾			
	1 500		12 000	12 000	11 (15)	14.75 (19.78)	–	–	1PM4105 - 2LW26 - 1 ■ S1			
	1 500		18 000	18 000	11 (15)	14.75 (19.78)	–	–	1PM4105 - 2LW26 - 1 ■ S1 ³⁾			
132	1 500		10 000	10 500	15 (20)	21 (28)	–	–	1PM4133 - 2LW26 - 1 ■ S1			
	1 500		15 000	15 000	15 (20)	21 (28)	–	–	1PM4133 - 2LW26 - 1 ■ S1 ³⁾			
	1 500		10 000	10 500	27 (36)	38 (51)	–	–	1PM4137 - 2LW26 - 1 ■ S1			
	1 500		12 000	12 000	27 (36)	38 (51)	–	–	1PM4137 - 2LW26 - 1 ■ S1 ³⁾			

Type:					IM B35, IM V15, IM V35					
Fans:										
Without fan combined					Top/right					
with terminal box/metric					Top/DE					
cable entry					Top/NDE					
					Top/left					
Axial fan/Blow-out direction below/Direction of air flow DE → NDE										
combined with terminal box/metric cable entry										
Radial fan/Blow-out direction NDE/Direction of air flow DE → NDE										
combined with terminal box/metric cable entry										

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Selection and Ordering Data

Motor type (continued)	Rated torque for star		Rated torque for delta		Moment of inertia	Weight, approx.		Rated current for star		SIMODRIVE 611 power module	
						1PM4	1PM6			Required rated output current ⁶⁾	Order No.
	M_{rated}		M_{rated}			m	m	I_{rated}		I_{rated}	
	S1	S6-40 %	S1	S6-40 %		I_{rated}	I_{rated}	S1	S6-40 %	S1	
	Nm (lb _f -ft)	Nm (lb _f -ft)	Nm (lb _f -ft)	Nm (lb _f -ft)	kgm ² (lb _f -in-s ²)	kg (lb)	kg (lb)	A	A	A	

1PM .101- ...	24 (18)	33 (24)	9 (7)	14 (10)	0.011 (0.097)	42 (93)	45 (99)	13	17.5	24	For ordering data, see Converter systems.
1PM .101- ... ³⁾	24 (18)	33 (24)	9 (7)	14 (10)	0.011 (0.097)	42 (93)	45 (99)	13	17.5	24	
1PM .105- ...	48 (35)	70 (52)	18 (13)	31 (23)	0.024 (0.212)	67 (148)	70 (154)	23	31	24	
1PM .105- ... ³⁾	48 (35)	70 (52)	18 (13)	31 (23)	0.024 (0.212)	67 (148)	70 (154)	23	31	24	
1PM .133- ...	70 (52)	105 (77)	26 (19)	47 (35)	0.046 (0.407)	90 (198)	94 (207)	41	58	45	
1PM .133- ... ³⁾	70 (52)	105 (77)	26 (19)	47 (35)	0.046 (0.407)	90 (198)	94 (207)	41	58	45	
1PM .137- ...	118 (87)	178 (131)	44 (32)	76 (56)	0.085 (0.752)	130 (287)	135 (298)	56	79	60	
1PM .137- ... ³⁾	118 (87)	178 (131)	44 (32)	76 (56)	0.085 (0.752)	130 (287)	135 (298)	56	79	60	
1PM6138- ...	140 (103)	210 (155)	53 (39)	93 (69)	0.104 (0.920)	–	156 (344)	58	80	60	
1PM6138- ... ³⁾	140 (103)	210 (155)	53 (39)	93 (69)	0.104 (0.920)	–	156 (344)	58	80	60	
1PM4101- ...	32 (24)	41 (30)	–	–	0.011 (0.097)	42 (93)	–	18	22.5	24	
1PM4101- ... ³⁾	32 (24)	41 (30)	–	–	0.011 (0.097)	42 (93)	–	18	22.5	24	
1PM4105- ...	70 (52)	94 (69)	–	–	0.024 (0.212)	67 (148)	–	38	47	45	For ordering data, see Converter systems.
1PM4105- ... ³⁾	70 (52)	94 (69)	–	–	0.024 (0.212)	67 (148)	–	38	47	45	
1PM4133- ...	95 (70)	134 (99)	–	–	0.046 (0.407)	90 (198)	–	55	74	60	
1PM4133- ... ³⁾	95 (70)	134 (99)	–	–	0.046 (0.407)	90 (198)	–	55	74	60	
1PM4137- ...	172 (127)	242 (178)	–	–	0.085 (0.752)	130 (287)	–	85	114	85	
1PM4137- ... ³⁾	172 (127)	242 (178)	–	–	0.085 (0.752)	130 (287)	–	85	114	85	

Options

Designation	Order code
Speed⁵⁾	
• With increased maximum speed	L37

When ordering a motor with options, **-Z** should be added to the order number and the order code should also be specified for each additional required version.

Order codes must not be repeated in plain text in the order.

Order No. **1PM4101-2LF86-1AS1-Z**

Order code **L37**



1PM6 motor (radial fan),
1PM6 motor (axial fan) and 1PM4 motor (liquid-cooled)